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American School
of Classical Studies
at Athens

THE LECHAEUM ROAD AND THE PROPYLAEA
AT CORINTH

[PLATES XVII, XVIII]

IN the year 1896, when the American School of Classical Studies at Athens was digging its first trial trenches at Corinth, a strip of white limestone roadway, running north and south, was discovered about 5 m. below the surface, in Trench No. III, between the temple hill and the next hill to the east. In subsequent years up to 1901, considerable strips of roadway, as well as some steps leading up to the foundations of a Roman arch standing on the edge of the Agora, were uncovered. Traces of this roadway were also discovered in several trial trenches to the north, the farthest, half a kilometer away, showing that this road, if continued, would run straight to the ancient harbor of Lechaeum. This, together with the fact that the fountain of Pirene was discovered close to the northeast corner of the arch, makes indisputable the identification of this roadway with that mentioned by Pausanias as "the straight road to Lechaeum."¹

This roadway, which, at least in the excavations, runs due north from the Propylaea or arch, is composed of a central way with raised sidewalks on either side (see PLATE XVIII). Where the Byzantine flight of steps (to be mentioned later) commences, the central way is 7.10 m. in width; whereas, at the

¹ Pausanias, II, 3, 2: *ὀλίγον δὲ ἀπωτέρω τῶν προπυλαίων ἐσιοῦσιν ἐν δεξιᾷ ἐστὶν Ἑρακλῆς χαλκοῦς· μετὰ δὲ αὐτὸν ἔσοδος ἐστὶ τῆς Πειρήνης ἐς τὸ ὕδωρ, . . . αὐθις δ' ἰοῦσιν ἐπὶ Λεχαίου τὴν εὐθείαν χαλκοῦς καθήμενός ἐστι Ἑρμῆς. παρέστηκε δέ οἱ κρύβς.*



THE LECHAEUM ROAD AT CORINTH: VIEW LOOKING SOUTH

northern end of the excavations 24 m. away, it has increased to 7.50 m. in width. Whether the breadth continues increasing, it is at present impossible to say, but it could scarcely continue indefinitely. The sidewalks are, like the central way, composed of large slabs of pink and white limestone, averaging 0.15 m. in thickness. They stand 0.295 m. above the road and are both 2.95 m. in width, while 0.20 m. from the outer edge of each are sunken curved gutters, 0.38 m. wide by 0.11 m. deep, all the slabs being laid in mortar upon a substantial foundation of *poros*.¹

On either side the splendor of this roadway was enhanced by a Corinthian colonnade. Of these colonnades that on the west is rather the better preserved, although even here there now only remains the stylobate, on which the base of the anta at the southern extremity was the only thing found in position. This stylobate is composed of white limestone blocks 0.81 m. wide by 0.30 m. high, and raised 0.045 m. above the sidewalk; it likewise gently inclines up the slope, rising 0.36 m. in 10 m.

Although there is but one base *in situ*, the positions of the others are easily determined by the pairs of dowel holes, 0.47 m. apart, which recur along the stylobate at a distance of 2.65 m. from centre to centre of the bases. Fortunately, some six bases with corresponding dowel holes have been found. They are of rather inferior marble, and, while 0.335 m. high, have a lower diameter of 0.78 m. as compared with that of 0.63 m. above. Their ornamentation is simple, consisting of a plain surface below and two tori with a scotia between them above. What the exact dimensions of the columns were is not certain, except that their lower diameter was 0.53 m. and their upper 0.46 m. They were, however, unfluted and entirely plain except for a slight enlargement at the top, as can be seen from the many fragments which have been discovered near at hand. Several Corinthian capitals of the same lower diameter have been likewise discovered, but it is impossible to decide as to either cornice or architrave, as fragments of many styles abound.

¹ *Poros* is here used for the soft brown limestone common to the district.

As may be seen from the Plan¹ (PLATE XVII), the back wall of this colonnade was formed by the front wall of a series of chambers. The exact purpose of these chambers is unknown, but they were probably stores which opened out into the covered passage-way (5.50 m. in width). That they date from the Roman period seems evident from the use of dovetail clamps and from their general construction. Their arched roofs (traces of which remain) probably supported the upper end of a sloping roof over the colonnade, and formed one of the several terraces around the hill where stands the temple of Apollo.

The stylobate of the colonnade on the east is even less well preserved than that on the west, possibly because it was built of light-colored conglomerate, instead of white limestone. Its dimensions correspond with those on the west, but instead of sloping upward with the roadway, this stylobate is practically level, and thus toward the north rises above the sidewalk, so that the *poros* foundation underneath is allowed to appear. The dowel holes are at the same intervals; but, instead of being in pairs, we have but one hole for each base. The depth of the porch here is the same as that on the west, but the back wall² seems less well constructed, and as for the most part only the lower courses remain, but one doorway near the southern end can be located.

The sidewalk on the west is interrupted some 7 m. from its southern end by a large base, probably intended for statues, which was built into the sidewalk and projected into the roadway. Unfortunately, it is badly broken, but its general form may still be recognized. It was raised somewhat above the sidewalk, but being level, instead of inclining with the sidewalk, it rose only 0.22 m. at the south as compared with 0.54 m. at the north; it is 8.85 m. in length. The south-

¹ Drawn by Mr. Benjamin Powell of the American School.

² This wall passes directly over the foundations of a small Greek temple shown on the plan, and thus shows that the latter was never rebuilt after the destruction of Corinth by Mummius in 146 B.C.

ern side seems to have risen abruptly from the sidewalk; the northern end is too badly broken to allow us to judge what was its original shape. From what remains it is, however, safe to say that in the rear the base protruded 0.22 m. over the stylobate, except where it was cut away to make room for the four column bases directly behind it. The front of the base projects 0.65 m. into the roadway, and in the centre of this is another projection of 0.53 m., which is 2.64 m. long. What stood upon this base is of course uncertain. Pausanias, upon leaving Pirene, mentions a statue of Hermes and the ram, which must have stood in the roadway, as the colonnades on either hand would have concealed anything beyond. Possibly, then, this statue stood here, and the columns behind it may



FIGURE 1. — ROMAN COINS OF CORINTH.

have supplied the idea of the canopy depicted on the bronze coins of the Roman period (Fig. 1). True, the dimensions of our base would be more appropriate for a larger group; but, on the other hand, Pausanias

would scarcely have left unnoticed so large and of necessity so conspicuous a monument as that on this base.

To the south of the base the gutter, which had at this point been turned at right angles, so as to discharge into the roadway, again resumes its course. The roadway then continues on for 7.30 m., to where the rather sharp incline of the ground necessitated a stairway. This stairway was constructed originally in Roman times; but later, in the Byzantine period, it became worn and broken, and the inhabitants of Corinth built another over it.

This Byzantine stairway is really scarcely more than an inclined roadway. It consisted of thirty-eight slightly inclined steps, which were raised only a few centimetres the one above the other, and which were constructed of various sized pieces of marble and limestone, ranging from paving stones to split

columns. Just when these steps were constructed is uncertain, but as some of the steps are made of blocks bearing inscriptions from the end of the Roman occupation, their date must be very late.

From beneath the sides of this stairway (which averaged less than 6.50 m. in width), the remains of the Roman stairway still project. This latter was very different in scheme and construction, as it consisted of two flights of steps with a platform between. The first step rises from the surface of the roadway about 6.62 m. to the south of the base already described, whereas the later or Byzantine flight extends almost to the base.

This step, and likewise the two succeeding ones, were about 0.225 m. high and 0.42 m. deep; but whereas the first extended only across the roadway, the next two reached from gutter to gutter across the sidewalks. No trace of a fourth step remains; but as the requisite height remaining to be attained to the platform above is 0.15 m. and the pavement of the platform above ends 0.84 m. behind the cutting in the top of the third step, we may assume that these were its dimensions.

The higher level to which these steps lead was a species of platform about 7.10 m. long, in which, although there were still gutters on the sides, there was no distinction between sidewalks and central roadway. The pavement consisted of large marble slabs, 0.08 m. in thickness, which are now badly broken. Even the small part of the pavement that remains shows signs of mending, and in one case an inscribed slab, upon which Publius Memmius (probably the *duumvir* of Nero's time) is mentioned, is used for this purpose. The gutter likewise has almost entirely disappeared, for while none at all remains on the east, that on the west is badly broken.¹

The colonnade continues along either side of this platform,

¹ It is of interest to note that opposite the doorway of the last shop the gutter is greatly worn, denoting the passage of many feet across to a doorway in the back wall of the east colonnade, which undoubtedly marked the western entrance to Pirene.

but here points of variance again appear; for while that on the west remains at its original level and its stylobate is thus considerably below the gutter of the platform, that on the east rises with the second step of the stairway, and then continues along flush with the top of the gutter. It is now, however, so badly disintegrated that no dowel holes appear, and hence we must assume that it was in this particular similar to the one on the west, which is much better preserved.

The western colonnade, and presumably the eastern one also, ended in an anta, which projected 1.80 m. beyond the front of the western of the two podia or buttresses which formed the two outer corners of the uppermost platform, and between which the stairway rose to this next level. This anta, the base of which was found *in situ*, was of the same type as the columns. It was of white limestone, as were 0.30 m. of the wall behind it, but the remainder was of *poros*.

The podia from which these antae projected were of almost uniform dimensions: the western 4.48 m., the eastern 4.45 m. in width. We thus have left between them a passageway of 5.18 m. through which the Roman as well as the later Byzantine steps ascended. They were composed of an outer *poros* wall with a filling of beton, and their fronts, revetted with marble, probably rose about 2.25 m. above the level of the second platform. Of this marble facing little now remains; of the remnants an idea may, however, be gained from the accompanying photograph of the east podium (Fig. 2).

The lower of the three blocks projects some distance inside the face of the podium, and we may therefore assume that it ran across the opening to the other podium, and thus formed one of the steps of the stairway. This block, however, is 0.17 m. above the pavement of the second platform and 0.39 m. to the south of it; wherefore we may likewise assume that the cutting on its face, 0.225 m. above the pavement, was intended for the back of another block which would have made the first step of the stairway, as well as the lowest ornament of the podium. We thus have the first two steps of the stairway,

each 0.225 m. in height and, to judge from the second, about 0.43 m. in depth. The weathering on the inner facing of the stairway, which consists of thin marble slabs, also seems to indicate the height of the third step as 0.225 m., but beyond this we have no other traces of the stairs.

Of the ornamentation of the podium we have other remains, for above the second step, which, like the first, reached across

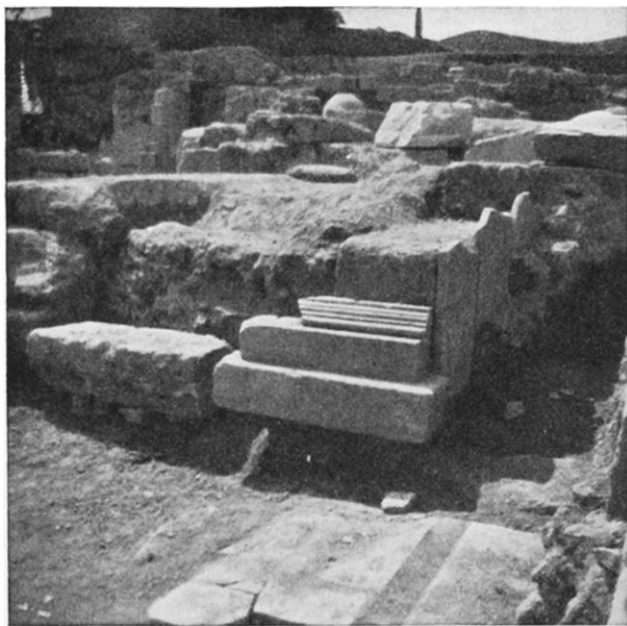


FIGURE 2. — LECHAEUM ROAD.

Remains of eastern podium, showing fragments of ornamentation on the front and the marble facing along the stairs.

from one anta to the other, we have two other blocks, one square, the other with moulding, and respectively 0.225 m. and 0.16 m. high. These blocks, however, did not go across the opening, but merely ran along the front of the podia, probably turning the inner corner, as a cutting there appears into which a piece of moulding similar to that on the front must have been fixed, extending back to the third step. Above the

block with the moulding there was nothing except slabs of marble 0.08 m. in thickness, which correspond to those with which the walls flanking the stairway were covered. What the ornament above them was, it is impossible to say, as no traces now remain. The probable effect of the podia, however, was that of two statue bases on a large scale, and the one on the right may have supported the bronze Heracles which Pausanias mentions as having stood near the Propylaea.¹

As to the exact number of steps, we shall never be absolutely certain, for, with the exception of the three already mentioned, the Byzantine steps cover all traces. To judge from the average height (0.225) of these three, and from the height to the upper platform to be attained by the flight (approximately 2.25 m.), it seems safe to say that this flight had ten steps, the upper of which was flush with the platform above.

When the earth had been removed from the western podium, it was found that portions of some steps of *poros* were protruding from the beton core, and on the removal of the beton from between the walls of this podium, a flight of five steps was uncovered (see Fig. 3). Likewise on the east a step corresponding to the first of these five was discovered protruding from under the east podium into the central opening. This first step, then, evidently originally ran from side to side, and we may safely assume this to have been the case with the others, although at present they do not do so. The dimensions of the steps are, however, considerably greater than those of the others already described; for, beginning 1.90 m. behind the face of the podium and 0.465 m. above the pavement, it is 0.535 m. high and 0.55 m. deep, while the others are all 0.40 m. deep and 0.255 m. high. To have gone deeper into the beton in the hope of discovering other steps would have been to destroy what remained of the podium, and naturally this was not done.

¹ Pausanias, II, 3, 2. It seems unnecessary to emend the text of Pausanias here from *ἐσιόδσιν* to *ἐξιόδσιν*; he probably anticipates the *ἔσοδος* of Pirene, and, meaning "on the right as one turns in" to visit Pirene, does not refer to the entrance to the Propylaea which he has just quitted.

In consequence it is impossible to say whether there were ever more steps below those now exposed; that there was, however, one more at the top is certain from the cutting in the upper step now *in situ*. This flight of steps led up to the same platform of *poros* to which the other Roman steps led; but whereas these latter were evidently of later construction, the steps of *poros*, although resting so far as can be seen on nothing but

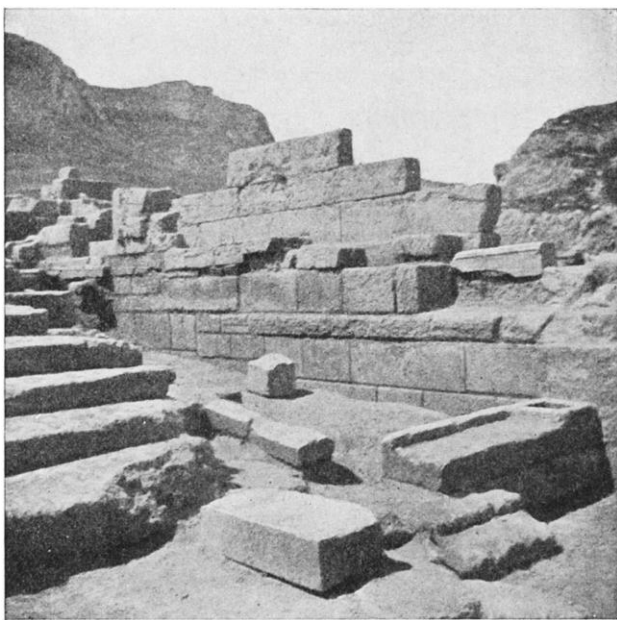


FIGURE 3.—LECHAEUM ROAD.

Walls to the west of the platform; also remains of three steps which led to the inclined way up to them. On the left, *poros* step leading to platform.

earth, are quite as surely of the same period as the platform. We thus have two Roman flights of steps: the earlier of *poros*, 11.80 m. in width, while built over this we find another stairway, constructed of marble, rising between the podia, which are likewise built directly over the earlier system. That the *poros* steps are Roman is certain, and consequently it seems probable that they were constructed immediately upon the rebuilding of

the city by Julius Caesar ; whereas the marble steps and lower platform, together, perhaps, with the marble colonnades and white limestone roadway (for it seems inconsistent to think of the latter two leading up to a flight of *poros* steps), were built at some date not far removed, but still sufficiently distant to allow the earlier system to become well worn.

The platform to which these stairs ascended was of necessity raised considerably above the level of the valley, especially on the east ; something more than an earth filling was therefore necessary between the walls.

On the eastern side of this platform the upper surface, although badly disintegrated, is composed entirely of beton, and thus the substructure is entirely hidden from view. On the west, however, the platform is better preserved, and consists of slabs of *poros* resting on cross walls, between which earth was probably packed. This platform dates from the period of the steps of *poros*. When, however, the marble steps were constructed, the platform was changed and covered with slabs of marble, 0.065 m. thick, and laid carefully in mortar. At the west the marble slabs rested in a cutting made for them in the top of the retaining wall. This wall on the west is flush with the top of the slabs, and that they extended to the west of it seems impossible, primarily because there are no suitable foundations, and, in the second place, because no such extension would have been possible on the east, since the wall there rises 0.41 m. above the pavement. We may therefore say with certainty that the platform never exceeded its present width of 13.30 m., while from the end of the podia to the upper, *i.e.* southern, platform was approximately 15.50 m.

The purpose of the walls directly to the west of the platform is not certain, but they seem to have been constructed with great care and probably were approached by an inclined way, access to which was given by a flight of three steps the remains of which end the covered passage-way just to the west of the western podium (cf. PLATE XVII). Whether this was covered by the roof of a colonnade along the edge of the platform can-

not be said; it is possible, but scarcely probable, as no trace of it appears.

The surface of the platform itself was probably unbroken except for a *poros* base, 3.63 m. long by 2.25 m. wide, which now rises 0.41 m. above the level of the pavement in the north-eastern portion of the platform. Whether this base was intended to support statues or not it is impossible to say, as no marks appear on any part of its surface. There is, however, a faint possibility that it may have been a fountain, for, carefully imbedded in a cutting which ran from the western wall to this base (indicated by heavy dark line on Plan), a lead pipe was discovered, which had been at some time broken off near the centre of the base. What purpose this pipe served, unless it was connected with a fountain on the base, I cannot say, for there are no indications in the platform itself that it continued farther, and there is no opening by which it could have passed through the wall to the east.

Whatever the purpose of this base, it abutted directly against the Propylaea, and immediately west of it there was the passage-way which led from the upper platform through the Propylaea into the Agora. The Propylaea in reality consisted of a Roman arch which is depicted on six coins of the period, ranging from the time of Augustus to that of Marcus Aurelius.¹ As may be seen from the reproduction of the four available coins, it is difficult to gain any definite idea of the structure from them, as the representations differ not only in detail, but even in the number of entrances (see Fig. 4).

Of the coins here reproduced, those of Domitian and Hadrian must be the more accurate, as the foundations themselves seem those of an arch with one entrance, rather than those of an arch with three. As may be seen from the Plan, the width of the two buttresses combined with the width of the doorway corresponds almost exactly with the width of the platform in front, so that to presume three entrances would necessitate an

¹ Imhoof-Blumer and Gardner, 'Numismatic Commentary on Pausanias,' *J.H.S.* vol. VI, 7.

extension of the pavement to both the east and west, which was clearly impossible on the east, and highly improbable on the west. To have a gateway double the width of the roadway seems, furthermore, as inconsistent as it would have been useless, for in all cases of arches with three openings, the central opening was intended for animals and vehicles, a division here made unnecessary by the nature of the approach, which would have allowed passage only to those on foot. Such being the case it seems almost superfluous to add that, of the eighteen other arches constructed before or during the reign of Augustus, from which period this arch (from its appearance on his coins) must date, only one, namely the arch at Fano,¹ is con-



FIGURE 4.—ROMAN IMPERIAL COINS, REPRESENTING THE PROPYLAEA AT CORINTH.

structed with three openings, and of these three the two smaller were merely passages cut through the wall into which that arch was built. In addition to this the relative width of the piers and the opening corresponds to the proportions of the arches on the coins of Domitian and Hadrian, while this is not at all the case as regards the proportions of those displayed on the other two.

The nature of the ground and of the surroundings have, however, necessitated such a structure, that at first sight the foundations might be taken for those of an arch with one large central opening and two side openings of almost equal width. As has been mentioned before, the roadway leads up through

¹ Baumeister, *Denkmäler des Klassischen Altertums*, vol. III, p. 1877.

a valley, at the head of which lay the Agora. The roadway, however, is not in the centre of this valley, but on its western slope, so that, when the conglomerate stratum which forms the upper end of the valley is reached, the road has not only the steep incline of the side hill, but also the perpendicular ascent of the terrace to overcome. This perpendicular rise had necessitated the steps and, joined together with the incline of the hill, it rendered necessary the construction of a large number of retaining walls, which, while forming a boundary to the Agora, at the same time supplied a level foundation for the arch, just north of the conglomerate stratum.

The extent of the retaining walls with which it is necessary to deal here is not great, for on the east they are terminated by the abrupt descent into Pirene, while on the west they are combined in the foundations of a portico, which here ran along the northern edge of the Agora. To the east of the piers of the arch and at a considerably lower level, appears a carefully laid wall (marked A on the Plan, PLATE XVII), which extended from the western end of the extension of the façade of Pirene at least as far as the edge of the eastern pier, and probably extended beyond under the western pier also (through B). This wall then made a level foundation for the arch, while it at the same time served as the substructure for other more lightly built retaining walls to be discussed later.

The piers of the arch, roughly 6.75 m. by 5.10 m. each, rose 2.35 m. to the south of the end of the pavement of the upper platform and were separated by an opening 3.65 m. in width. On their northern faces they have each projections 1.45 m. by 1.45 m. on either side of the doorway, which probably served as supports for the columns with which it was customary to decorate arches of this type. It is possible that there were likewise corresponding projections at the outer ends of these faces, although on the east the raised *poros* wall flanking the pavement may have served this purpose; while on the west it is impossible to say whether there is a projection or whether it is a continuation of the wall on this side, so badly has it been hacked

by the later inhabitants when constructing a drain. The inner projections, now *in situ*, are connected by a cross wall, which acted at the same time as a retaining wall, and as a foundation for the last step of a series of three which led up from the pavement to the entrance. Behind this wall a rectangular open space, about 3.65 m. square, was left, which was probably packed with earth, while behind it the piers are joined together by a strip of solid masonry, the worn condition of which seems to prove its use as the flooring at that end of the entrance.

To the west of the piers we find at a distance 3 m. a substantial structure connected with the foundations of the western pier by stout cross walls 2.50 m. apart, which without doubt formed the east end of the porch here bounding the Agora. The walls connecting these two are carefully laid and doubtless served as retaining walls, as we find traces of corresponding ones on the east which have been partly destroyed in later times. Those on the east rested on the heavy foundation wall (B) mentioned before, and possibly those to the west did the same if the wall extended so far. The length of the eastern wall is, however, 0.70 m. greater than that of those on the west and the buttress with which they are connected appears, although it may have supported some superstructure, to have served merely as a retaining wall above Pirene. That this buttress and that forming the end of the porch to the west could ever have formed part of the arch is clearly impossible. In the first place, not only do their distances from the central piers differ, but their lengths neither correspond with one another, nor are either of the same length as the central piers. We must therefore assume that the representations on the coins of Antoninus Pius and Commodus are incorrect. As regards the coins of Domitian and Hadrian, the type of arch represented seems correct; but we cannot judge as to the details on account of the present condition of the ruins. It seems, however, safe to say that the northern front was ornamented with columns, while the southern, to judge from the foundations, was plain. The coins, however, all agree in plac-

ing a quadriga over the arch,¹ whereas Pausanias clearly mentions two, one of Helius and the other of Phaethon; this difference, however, is undoubtedly due to the necessarily limited perspective of coins.

That Pausanias and the other writers of antiquity took so little notice of this arch and its approach appears strange, for not only was this paved roadway so substantial as to be the only one of its kind now preserved in Greece, but the vista, as one came up over the edge of the lower terrace from the harbor of Lechaeum and looked up the long white road flanked by colonnades and ornamented by groups of statuary, to where



FIGURE 5.—MIRROR-CASE FROM CORINTH.

crowning all stood the arch with its gilded bronze quadrigas outlined against Acrocorinth, must have produced an impression not easily to be forgotten.

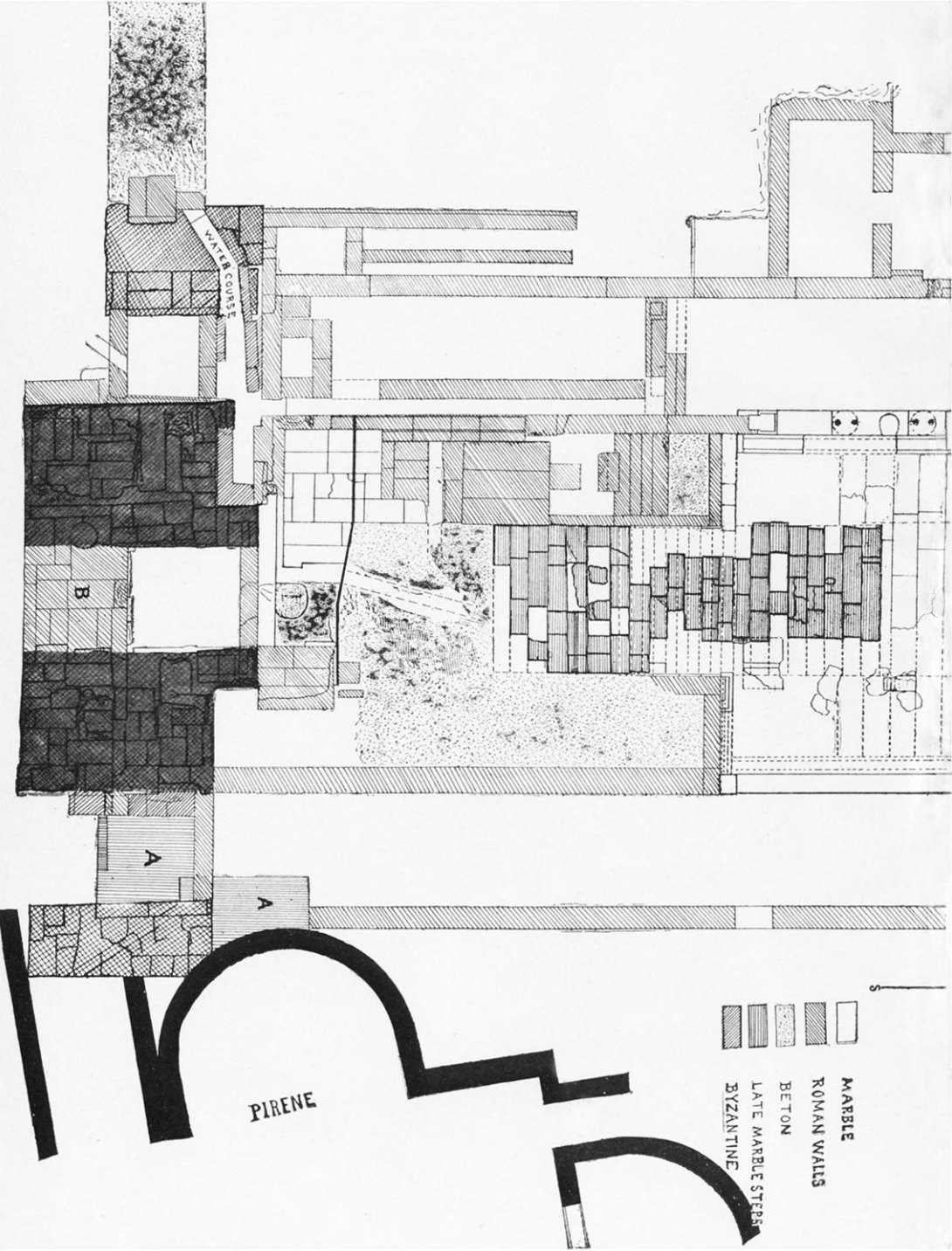
NOTE. — Since writing this article, Dr. Richardson of the American School at Athens has sent me a photograph of a bronze mirror-case, bearing on one side a medallion representing a triumphal arch with a single opening and on the other a head of the Emperor Nero with the usual titular inscription (Fig. 5).

¹ A coin of Marcus Aurelius represents an arch with three openings, but differs in having a biga instead of a quadriga above. Cf. Mionnet, *Supp.*, vol. IV, p. 682.

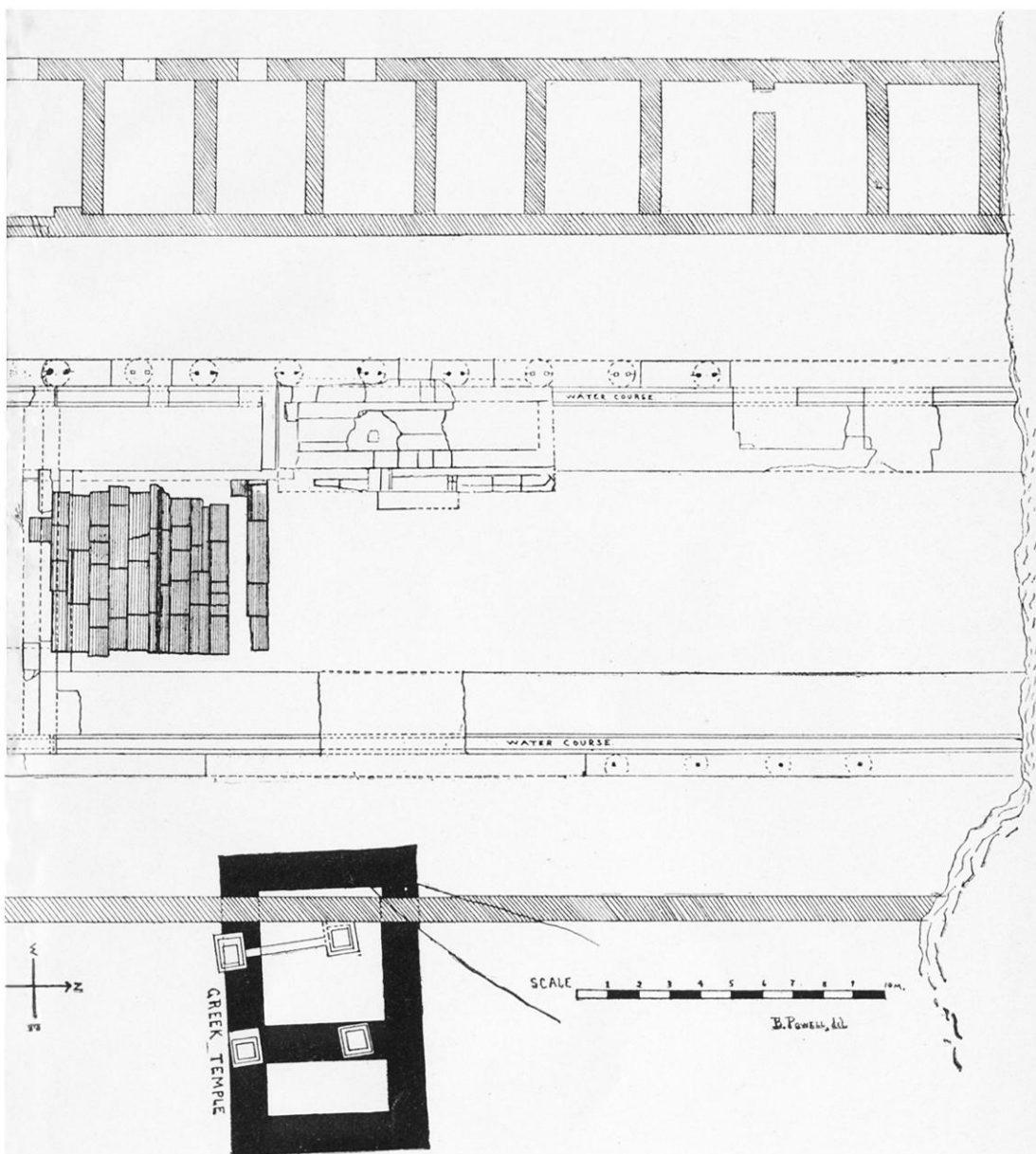
This case is in the hands of a dealer in antiquities at Athens, who asserts that it was found at Corinth. If this be so, it is additional and seemingly conclusive evidence that the Propylaea had but one opening. As may be seen from the illustration, the arch, while not exactly like those on the coins, is, nevertheless, of the same type as those of Domitian and Hadrian. It gives more details than any of the coins; it shows the Corinthian columns at the corners as I have supposed them and has the quadriga on top. What the draped figures beside the quadriga, the figures flying from the upper corners, the figure in a niche at the side or the festoon at the top of the arch represent, I do not attempt to decide.

It will be noticed that the four horses shown on this mirror-case bear a decided resemblance to those over the central doorway of St. Mark's Cathedral at Venice, and this is a sufficient excuse for referring here to the half-legendary accounts found in some Byzantine writers, and still current in Greece, that the famous quadriga placed in the hippodrome at Constantinople came from some building at Corinth and was the work of Lysippus; other writers say that a quadriga at Constantinople was brought from Chios, but there may well have been one from each place among the many treasures of art gathered at their capital by the Byzantine emperors. It is well known that the bronze horses at Venice were taken thither from Constantinople.

JOSHUA M. SEARS, JR.



THE LECHAEUM ROAD AND THE PRO



PYLAEA AT CORINTH: GROUND-PLAN